

Amendments to The Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claims 1-45 (canceled)

46. (new) A method for migrating Business Applications executed on a data processing system to a modern environment wherein said Business Applications hitherto offer their services interactively controlled by a multitude of Business Application panels and wherein said Business Applications may display succeeding Business Application panels dependent on user interactions, user specified data and the contents of a database operated on by the Business Applications, said method comprising:

arranging one or more of the Business Applications into one or more Transaction Objects;

arranging one or more of said Transaction Objects into one or more Transaction Object Methods enabled to transparently and autonomously execute the underlying Business Applications by handling a sequence of Business Application panels;

transparently signaling Transaction Objects in at least one of said Transaction Object Methods to execute Business Applications to create Business Objects, said Business Objects being maintained in Business Object Instance Space in the database;

communicating between Transaction Objects in said Transaction Object Methods with messages arranged in defined Transaction Records, each Transaction Record being instantiated with a related one Transaction Object to supply or retrieve data as part of the related one Transaction Object invocation; and

retrieving Business Objects from said Business Object Instance Space automatically and placing said retrieved Business Object in a Transaction Record when said retrieved Business Object is needed later in the Transaction Object Method such that Business Objects may be reused.

47. (new) The method according to claim 46 further comprising:

Arranging said Business Applications and said Transactions Objects from a large number of Business Applications to form a new application system comprising at least one Transaction Object Method having a small number Business Applications and interaction of Transaction Record messages between said Transaction Objects.

48. (new) The method according to claim 47 wherein said Transaction Object Method formed of said new application system is uniquely identified by user chosen identifier.

49. (new) The method according to claim 46 wherein said Transaction Record comprises an external Transaction Record which calls another Transaction Object.

50. (new) The method according to claim 46 wherein said Transaction Record comprises an internal Transaction Record which starts the Transaction Object.

51. (new) The method according to claim 46 wherein said Transaction Record comprises a preemptive Transaction Record which contains data which is provided in advance for use by a Transaction Object Method.

52. (new) The method according to claim 46 wherein said Transaction Record comprises an interactive which contains data

which is not provided in advance, but whose data is the result of earlier run Transaction Objects run by said Transaction Object Method.

53. (new) The method according to claim 46 wherein said Transaction Record includes parameters and keystrokes.

54. (new) The method according to claim 53 wherein said keystrokes include keystrokes generated by PF keys.

55. (new) The method according to claim 46 further comprising detecting all Transaction Records needed for said Transaction Object Method and automatically associating said Transaction Object Method with said detected needed Transaction Records.

56. (new) The method according to claim 46 wherein said Transaction Object Methods are placed into a graph, said graph showing successors and predecessors of Business Applications, Transactions Objects and Business Objects making up said Transaction Object Methods.

57. (new) The method according to claim 56 wherein said graph is analyzed to determine if all data and Business Objects are known to perform said Transaction Object Methods from legacy Business Applications.

58. (new) An apparatus for migrating Business Applications executed on a data processing system to a modern environment wherein said Business Applications hitherto offer their services interactively controlled by a multitude of Business Application panels and wherein said Business Applications may display succeeding Business Application panels dependent on user interactions, user specified data and the contents of a database operated on by the Business Applications, said apparatus comprising:

one or more of the Business Applications arranged into one or more Transaction Objects;

one or more of said Transaction Objects arranged into one or more Transaction Object Methods enabled to transparently and autonomously execute the underlying Business Applications by handling a sequence of Business Application panels;

said data processing system transparently signaling Transaction Objects in at least one of said Transaction Object Methods to execute Business Applications to create Business Objects, said Business Objects being maintained in Business Object Instance Space in the database;

said data processing system further communicating between Transaction Objects in said Transaction Object Methods with messages arranged in defined Transaction Records, each Transaction Record being instantiated with a related one Transaction Object to supply or retrieve data as part of the related one Transaction Object invocation; and

said data processing system further retrieving Business Objects from said Business Object Instance Space automatically and placing said retrieved Business Object in a Transaction Record when said retrieved Business Object is needed later in the Transaction Object Method such that Business Objects may be reused.

59. (new) The apparatus according to claim 58 further wherein said data processing system further arranges said Business Applications and said Transactions Objects from a large number of Business Applications;

a new application system comprising at least one Transaction Object Method having a small number Business Applications; and

Transaction Record messages providing interaction between said Transaction Objects.

60. (new) The apparatus according to claim 59 wherein said Transaction Object Method formed of said new application system is uniquely identified by a user chosen identifier.

61. (new) The apparatus according to claim 58 wherein said Transaction Record comprises an external Transaction Record which calls another Transaction Object.

62. (new) The apparatus according to claim 58 wherein said Transaction Record comprises an internal Transaction Record which starts the Transaction Object.

63. (new) The apparatus according to claim 58 wherein said Transaction Record comprises a preemptive Transaction Record which contains data which is provided in advance for use by a Transaction Object Method.

64. (new) The apparatus according to claim 58 wherein said Transaction Record comprises an interactive which contains data which is not provided in advance, but whose data is the result of earlier run Transaction Objects run by said Transaction Object Method.

65. (new) The apparatus according to claim 58 wherein said Transaction Record includes parameters and keystrokes.

66. (new) The apparatus according to claim 65 wherein said keystrokes include keystrokes generated by PF keys.

67. (new) The apparatus according to claim 58 wherein said data processing system detects all Transaction Records needed for said Transaction Object Method and automatically associating said Transaction Object Method with said detected needed Transaction Records.

68. (new) The apparatus according to claim 58 comprising a graph into which are placed said Transaction Object Method, said graph showing successors and predecessors of Business Applications, Transactions Objects and Business Objects making up said Transaction Object Methods.

69. (new) The apparatus according to claim 68 wherein said data processing system analyzes said graph to determine if all data and Business Objects are known to perform said Transaction Object Methods from legacy Business Applications.

70. (new) A program product for migrating Business Applications executed on a data processing system to a modern environment wherein said Business Applications hitherto offer their services interactively controlled by a multitude of Business Application panels and wherein said Business Applications may display succeeding Business Application panels dependent on user interactions, user specified data and the contents of a database operated on by the Business Applications, said program product comprising:

a computer readable medium having recorded thereon computer readable program code performing the method comprising:

arranging one or more of the Business Applications into one or more Transaction Objects;

arranging one or more of said Transaction Objects into one or more Transaction Object Methods enabled to transparently and autonomously execute the underlying Business Applications by handling a sequence of Business Application panels;

transparently signaling Transaction Objects in at least one of said Transaction Object Methods to execute Business Applications to create Business Objects, said Business Objects being maintained in Business Object Instance Space in the database;

communicating between Transaction Objects in said Transaction Object Methods with messages arranged in defined Transaction Records, each Transaction Record being instantiated with a related one Transaction Object to supply or retrieve data as part of the related one Transaction Object invocation; and

retrieving Business Objects from said Business Object Instance Space automatically and placing said retrieved Business Object in a Transaction Record when said retrieved Business Object is needed later in the Transaction Object Method such that Business Objects may be reused.

71. (new) The program product according to claim 70 wherein said method further comprises:

arranging said Business Applications and said Transactions Objects from a large number of Business Applications to form a new application system comprising at least one Transaction Object Method having a small number Business Applications and interaction of Transaction Record messages between said Transaction Objects.

72. (new) The program product according to claim 71 wherein said Transaction Object Method formed of said new application system is uniquely identified by user chosen identifier.

72. (new) The program product according to claim 70 wherein said Transaction Record comprises an external Transaction Record which calls another Transaction Object.

73. (new) The program product according to claim 70 wherein said Transaction Record comprises an internal Transaction Record which starts the Transaction Object.

74. (new) The program product according to claim 70 wherein said Transaction Record comprises a preemptive Transaction Record which contains data which is provided in advance for use by a Transaction Object Method.

75. (new) The program product according to claim 70 wherein said Transaction Record comprises an interactive which contains data which is not provided in advance, but whose data is the result of earlier run Transaction Objects run by said Transaction Object Method.

76. (new) The program product according to claim 70 wherein said Transaction Record includes parameters and keystrokes.

77. (new) The program product according to claim 76 wherein said keystrokes include keystrokes generated by PF keys.

78. (new) The program product according to claim 70 wherein said method further comprises detecting all Transaction Records needed for said Transaction Object Method and automatically associating said Transaction Object Method with said detected needed Transaction Records.

79. (new) The program product according to claim 70 wherein said Transaction Object Methods are placed into a graph, said graph showing successors and predecessors of Business Applications, Transactions Objects and Business Objects making up said Transaction Object Methods.

80. (new) The program product according to claim 79 wherein said graph is analyzed to determine if all data and Business Objects are known to perform said Transaction Object Methods from legacy Business Applications.